1. Here are the daytime temperatures for a week in December 2009 which was called 'The Big Freeze':

| Mon | Tues | Wed | Thurs | Fri | Sat | Sun |
|-----|------|------|-------|-------|-------|------|
| 1°C | 0°C | -3°C | -11°C | -14°C | -12°C | -5°C |

What is the difference between the temperatures on Monday and on Friday?

What is the difference between the temperatures on Sunday and Friday?



2. Here are the overnight temperatures for one week in December:

| Mon | Tues | Wed | Thurs | Fri | Sat | Sun |
|-------|-------|-------|-------|-------|------|-----|
| -17°C | -22°C | -21°C | -18°C | -14°C | -7°C | 2°C |

What is the difference between the temperatures on Tuesday and Saturday?

What is the difference between the temperatures on Sunday and Friday?



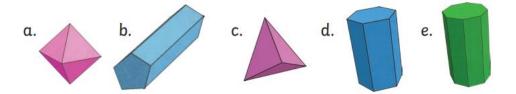
Jane has some large ice cubes, which she is measuring.
 They measure 38mm along one side of the cube.



- a. What is this measurement in cm?
- b. If she lines up ten ice cubes, what will the length of the line be in mm and cm?
- c. Jane then lets one ice cube melt. She ends up with 55ml of water how much water in litres would she have from 100 ice cubes?
- 4. Joe needs to do these things today before he goes out.
 What time will he have to start to be done for 12pm noon?

| Job | Time | | |
|--------------------|------------|--|--|
| Have breakfast | 20 minutes | | |
| Have a shower | 15 minutes | | |
| Check emails | 25 minutes | | |
| Homework | 1 hour | | |
| Watch TV programme | 35 minutes | | |
| Practise Guitar | 25 minutes | | |

5. Jane makes some different shaped ice cubes by putting water in different containers and leaving them outside in the overnight frost. What are the names of the 3D shapes she has made?



6. A farmer wants to start a Christmas tree farm and is looking at an area to fence off for planting trees. Work out the area of each of these designs so he can work out which works out the best cost.

